

Title (en)

MULTI-STAGE AMPLIFIER WITH NEGATIVE FEEDBACK

Title (de)

MEHRSTUFIGER VERSTÄRKER MIT NEGATIVER RÜCKKOPPLUNG

Title (fr)

AMPLIFICATEUR À PLUSIEURS ÉTAGES À RÉTROACTION NÉGATIVE

Publication

**EP 3367561 A1 20180829 (EN)**

Application

**EP 18159075 A 20180228**

Priority

CN 201710116542 A 20170228

Abstract (en)

This application discloses a circuit system, including an operational amplification circuit. The operational amplification circuit includes N stages of operational amplification units that are cascaded, an input terminal of the 1<sup>st</sup> stage of operational amplification unit is an input terminal of the operational amplification circuit, and an output terminal of the N<sup>th</sup> stage of operational amplification unit is an output terminal of the operational amplification circuit; an output terminal of the i<sup>th</sup> stage of operational amplification unit is connected to an input terminal of the (i+1)<sup>th</sup> stage of operational amplification unit, so as to provide an input signal for the (i+1)<sup>th</sup> stage of operational amplification unit; and there is a feedback channel from the output terminal of the N<sup>th</sup> stage of operational amplification unit to an input terminal of each of the 1<sup>st</sup> stage of operational amplification unit to the N<sup>th</sup> stage of operational amplification unit, so as to transmit an output signal of the N<sup>th</sup> stage of operational amplification unit to the input terminal of each stage of operational amplification unit. In the circuit system in this application, the feedback channel is added to the operational amplification circuit, so that a loop gain of the operational amplification circuit can be increased, and non-ideal features of the operational amplification circuit can be suppressed when a load circuit is driven, thereby improving performance.

IPC 8 full level

**H03F 1/32** (2006.01); **H03F 3/45** (2006.01)

CPC (source: CN EP US)

**H03F 1/02** (2013.01 - US); **H03F 1/3211** (2013.01 - EP US); **H03F 1/34** (2013.01 - CN); **H03F 3/45** (2013.01 - US); **H03F 3/45475** (2013.01 - EP US); **H03F 3/68** (2013.01 - CN); **H03F 2200/129** (2013.01 - EP US); **H03F 2200/135** (2013.01 - EP US); **H03F 2200/144** (2013.01 - EP US); **H03F 2200/405** (2013.01 - EP US); **H03F 2200/408** (2013.01 - EP US); **H03F 2200/411** (2013.01 - EP US); **H03F 2203/45114** (2013.01 - EP US); **H03F 2203/45116** (2013.01 - US); **H03F 2203/45224** (2013.01 - EP US); **H03F 2203/45512** (2013.01 - EP US); **H03F 2203/45526** (2013.01 - EP US); **H03F 2203/45528** (2013.01 - EP US); **H03F 2203/45594** (2013.01 - US)

Citation (search report)

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Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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DOCDB simple family (application)

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